

of banana leaves leaving only the upper epidermis. As a result of this the leaves skeletonised, dried and curled downward. In severe cases, the leaves completely dried. The grown up caterpillars defoliated the plants, especially of the tender leaves, and migrated from plant to plant.

In recent years, outbreaks of *D. obliqua* and *E. fraterna* have been noted on *Dolichos lablab*, limabeans, mulberry, horsegram, soybean, blackgram and *Phaseolus mungo* causing considerable loss round about Bangalore.

This report is the first on banana.

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24. OCCURRENCE OF GREEN STRIPED BORER, *MALIARPHA SEPARATELLA* RAGONOT ON SORGHUM IN THE PUNJAB *Maliarpha separatella* Ragonot (Phycitinae, Pyralidae: Lepidoptera) has been reported as a common pest of rice in Africa (Anonymous 1970) and is widely distributed in Ethiopian, Palaeotropic and Oriental regions (Kapur 1967). In India *M. separatella* was reported by Hampson (1896) as *Anerastia pallidicosta* from Punjab and Arunachal Pradesh. He also gave its distribution as Sri Lanka, Burma and China. After this record this insect does not seem to have been reported from anywhere in India.

During December 1971, green caterpillars were observed in the stubbles of sorghum 2-4 cm below soil level. On an average one larva per stubble and as many as 12 per cent stubbles having more than one larva with a maximum of 4 larvae only in 5 stubbles were recorded. During September 1972 larvae were observed in the basal region of sorghum plants (CSH-1). The larvae were again observed during November-December 1972 in the stubbles. This is the first record of sorghum as a host of *M. separatella*. So far it has been recorded primarily from rice plant in Africa and rarely from a wild grass weed *Echinochloa holubii* in Swaziland (Anonymous 1970).

Preliminary observations on its biology was made in the laboratory by supplying fresh tender splitted stems of sorghum to the larvae and changing the food as and when required. Brief description of various

stages is given below. Larvae; well developed body light green, head light brown, exhibit sexual dimorphism. Male larvae with five violet to reddish stripes measured 20-25 mm. Female larvae 30 mm in length, stripes poorly defined. Crochets are complete and biordinate. Larval period lasted for about 6-9 weeks, during winter. A thin silken cocoon was spun for pupation. Pupae; greenish when freshly formed turned brownish with age. Six anal conspicuous setae were borne by both sexes of pupae: Pupation occurred in the basal stem region or in stubbles and lasted for 14-16 days. Maximum pupation took place at the end of February and moth emergence continued up to middle of March. Adults are stout (20-25 mm) with prominent dark red coloured band on forewings, more deep in females. The female laid yellowish white oval eggs in batches of 5-16 on the wire mesh of cage.

Since rice is attaining importance in the Punjab and the area is on the increase, it is quite likely that *M. separatella* might shift to rice to attain the status of a major pest of that crop in India like in Africa or may prove serious on sorghum. More information is needed on its biology and seasonal abundance on sorghum.

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#### 25. A NOTE ON THE BEHAVIOUR OF THE DAMMER BEE, *MELIPONA IRIDIPENNIS* D.

The tiny, dark, dammer bee, *Melipona iridipennis* D. (Apidae: Hymenoptera) inhabits crevices in walls, hollow trunks of trees etc. The sting